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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,898	03/24/2000	Robert G. Arsenault	PD-990194	2341

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THE DIRECTV GROUP INC
PATENT DOCKET ADMINISTRATION RE/R11/A109
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EXAMINER	
HOYE, MICHAEL W	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/534,898	ARSENAULT ET AL.	
	Examiner	Art Unit	
	Michael W. Hoye	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/19/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicants' arguments, see Remarks Filed to Office Action Dated April 9, 2004, filed on July 9, 2004, with respect to the rejections of independent claims 1, 11 and 16 under one or more of Hawkins et al (USPN 6,005,561) and Wood et al (US 2002/0054752) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Payton (USPN 5,790,935), in view of Chaney et al (USPN 5,642,153), as described below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-2, 7, 11, 15-16 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over Payton (USPN 5,790,935), in view of Chaney et al (USPN 5,642,153), both cited by the Examiner.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

As to claim 1, note the Payton et al reference, which discloses a method of transmitting, receiving, storing and displaying television program data. The claimed transmitting program data including scheduled program data, program guide data, and cache program data comprising broadcast programming of one or more television programs is met by the central distribution server 24 in Fig. 2 (col. 4, lines 55-64), which transmits the program data through the central transmitter 48 to the local receivers 52 (col. 5, lines 55-67), including an initial menu or program guide, which may show all program offerings with recommended items highlighted (col. 6, lines 31-36), where the claimed cache program data is specifically met by the recommended programs that are transmitted to and stored at the local server 28 or receiver (col. 6, lines 1-19), which meets the claimed receiving the program data and the claimed storing the cache program data. The claimed selecting a cache television program is met by the subscriber interface 58 displaying

a list 44 of recommended items and the subscriber may select one of the displayed items using the control device or by requesting a menu of the remaining available items (col. 6, lines 26-36). The claimed retrieving a portion of the cache program data that corresponds to the selected cache television program is met by a subscriber selecting or requesting an item 36 that has been stored on local storage 56, where the decryption and decompression processor 60 decrypts, decompresses and converts the item from the digital format into a standard video or audio signal (col. 6, lines 10-36), and the claimed generating a display of the selected cache television program for viewing based upon the retrieved portion of cache program data is met by sending the signal to the subscriber's playback device 32, which includes some type of video display 62 such as a TV or a computer monitor (col. 6, lines 15-22). Although it is well known in the art to have to have objects or boot objects comprising service channel identification or SCID numbers identifying the location of different types of data being received in the broadcast stream, including a SCID number for identifying the location of the cache program data, the Payton reference does not specifically disclose or describe the claimed transmitting a boot object having location information associated with the cable program data and requiring storage of the cache program data, and storing the cache program data based on location information stored in the boot object. However, the Chaney et al reference teaches a system that is capable of transmitting hundreds of programs with a number of services, which may include video signals, audio signals, closed caption signals, or other data, including executable computer programs for an appropriate receiver, where each service of each program is identified by a unique Service Component Identifier (SCID), and the information for the respective services is transmitted in packets of predetermined amounts of data and each packet includes a SCID corresponding to the service

(see col. 4, lines 9-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of transmitting, receiving, storing and displaying of the Payton reference to further include the teachings of Chaney et al that includes transmitting a boot object or executable programs comprising a SCID for the advantages of allowing a broadcaster to specify location information and require storage of cache program data in end-user terminals, in addition to providing frequent boot object transmissions in the event the power is lost and restored to a terminal, and moreover, the receiver needs to know where to look for location information associated with the cache program data so that the receiver can retrieve data from the appropriate service channel or component and store the data in the local receiver storage accordingly.

As to claim 2, the claimed storing of the cache program is based upon identifying an identifier associated with the cache program data is met by the Payton reference through a list of recommended items for each subscriber where the items are prioritized and broadcast to specific subscribers and the programs are stored on the subscribers local server 28 according to the schedule of broadcast for items being transmitted to the local receivers 52 (see col. 5, lines 12-67). In addition, the Chaney et al reference discloses Service Channel Identifiers (SCIDs) as previously described above in claim 1.

As to claim 7, the claimed transmitting identification data that instructs a receiver about the identifier associated with the cache program data is met by the list 44 of recommended items, their average ratings, and comments (col. 6, lines 26-29), along with Chaney et al reference as described above, which discloses the boot code that contains identification data that instructs a

receiver or end-user terminal about the SCIDs associated with the cache program data (see col. 4, lines 9-19).

As to independent claims 11 and 16, the claims are rejected based on the rejection of claim 1 as described above.

As to claims 15 and 20, the claimed boot object comprises a service channel identification (SCID) number identifying the location of the cache program data is met by the Chaney et al reference as combined with Payton as described above in the rejection of claim 1.

As to claims 21-23, the claimed cache program data comprises at least one of video data and audio data of broadcast programming is met by the Payton reference where the cache program data may comprises videos or broadcast programming, audio selections and computer applications (see col. 4, lines 55-58).

4. Claims 3-5, 12-13 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payton (USPN 5,790,935), in view of Chaney et al (USPN 5,642,153), in further view of Walters et al (USPN 5,710,970), all cited by the Examiner.

As to claim 3, the Payton and Chaney et al references are silent as to the claimed a transmission rate of the cache program data is different than a retrieval rate of the cache program data. The Walters et al reference teaches a transmission rate of the cache program data is different than a retrieval rate of the cache program data as described in col. 3, lines 37-63, where the transmission rate is much faster or higher than the subscriber access time through the use of a high speed compressed digital video transmission rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of

transmitting, receiving, storing and displaying television program data of Payton and Chaney et al with the high speed compressed digital video transmission rate as taught by Walters et al. One of ordinary skill in the art would have been led to make such a modification since transmitting programs in a compressed digital format would allow the user to view a program much faster than if the program was transmitted in real time, in addition, the subscriber would be able to accumulate a plurality of programs in a relatively short amount of time.

As to claim 4, as noted above, the claimed transmission rate of the cache program data is higher than the retrieval rate of the cache program data is met by the Walters et al reference.

As to claim 5, the Walters et al reference further teaches the claimed transmission rate of the cache program data is approximately twice the retrieval rate of the cache program data as described in col. 3, lines 61-63, where a different transmission rate may be used which could be approximately twice as fast as the subscriber access time through the use of a high speed compressed digital video transmission rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the method of transmitting, receiving, storing and displaying television program data of Payton and Chaney et al with the high speed compressed digital video transmission rate as taught by Walters et al, where the compressed digital video transmission rate could be approximately twice the retrieval rate of the cache program data or subscriber access time. One of ordinary skill in the art would have been led to make such a modification since transmitting programs in a compressed digital format would allow the user to view a program much faster than if the program was transmitted in real time, in addition, the subscriber would be able to accumulate a plurality of programs in a relatively short amount of time. Moreover, Walters et al teaches various compressed digital

video transmission rates, so having a transmission rate at approximately twice the retrieval rate would have been an obvious design choice for the transmission rate since very high compression rates may be difficult to achieve and using an approximate rate of 2 to 1 for the ratio of transmission to retrieval is commonly used for compressed transfer modes.

As to claims 12-13 and 17-18, the claims are rejected based on the same arguments made for the rejection of claims 3-4 respectively.

5. Claims 6, 8-9, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payton (USPN 5,790,935), in view of Chaney et al (USPN 5,642,153), in further view of Gudesen (USPN 5,761,607), all cited by the Examiner.

As to claim 6, the Payton and Chaney et al references are silent as to the claimed transmission rate of the cache program data is lower than a retrieval rate of the cache program data. However, the Gudesen reference teaches a transmission rate of the cache program data is lower than a retrieval rate of the cache program data in col. 6, lines 27-41, where transmission or updating can be performed by transferring data via phone lines with low capacity or by using other transmission means, such as satellite lines, cable networks, radio lines, etc. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of transmitting, receiving, storing and displaying television program data of Payton and Chaney et al with the low capacity method of Gudesen. One of ordinary skill in the art would have been led to make such a modification since transmitting programs in a low capacity format that is slower or lower than the retrieval rate of the cache program data would

allow the local cache or mass storage unit to acquire the cache program data over a longer period of time which would free up a significant amount of bandwidth in the transmission medium.

As to claim 8, the claimed maintaining a record of selection representing selected cache television programs is met by the Payton reference where subscriber profiles and requests, or a record of the viewing history or programs that have been recorded, stored, or cached by the user is maintained and transmitted to the headend or central distribution server (col. 3, lines 2-12 and col. 6, lines 44-50). The Payton and Chaney et al references are silent as to assessing a fee based upon the record of selection. The Gudesen reference teaches assessing a fee based upon the record of selection (col. 6, lines 5-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of maintaining a record of selection representing selected cache television programs as taught by the Payton reference with the method of assessing a fee based upon the record of selection as taught by the Gudesen reference. One of ordinary skill in the art would have been led to make such a modification since it is well known in the art of video distribution systems with pay-per-view or purchasing methods to maintain a record of the program viewed and/or recorded and assess a fee based on the selection made.

As to claim 9, the Payton reference teaches the record of selection is maintained at the receiver as met by the local server monitoring the subscriber's viewing habits where the record of the viewing history or habits of the programs that have been recorded by the user are inherently maintained at the receiver and may be transmitted to the central distribution server as described above in claim 8 for improving prediction based on the subscriber profile (col. 3, lines 2-12 and col. 6, lines 44-50).

As to claims 14 and 19, the claims are rejected based on the same arguments made in the rejection of claim 6.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Payton (USPN 5,790,935), in view of Chaney et al (USPN 5,642,153), in further view of Gudesen (USPN 5,761,607), as applied to claim 8 above, and in further view of Tsuria et al (USPN 6,424,947), all cited by the Examiner.

As to claim 10, the Payton, Chaney et al, and Gudesen references are silent as to the record of selection is maintained in a memory of an access card at the receiver. The Tsuria et al reference teaches the use of an access card or "smart card" that may collect and store specific information, such as information related to viewing or purchasing habits of the subscriber (see col. 8, lines 49-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the methods taught be by the Payton, Chaney et al and Gudesen references with the method of maintaining the record of selection in a memory of an access card at the receiver as taught by the Tsuria et al reference. One of ordinary skill in the art would have been led to make such a modification since it is well known in the art of video distribution systems with pay-per-view or purchasing methods to use access cards or "smart cards" at the receiver to maintain a record of the program viewed and/or recorded and assess a fee based on the selection made.

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Arsenault et al (USPN 6,701,528) – Discloses virtual video on demand using multiple encrypted video segments.

Chaney et al (USPN 5,867,207) – Discloses a program guide in a digital video system, and also teaches the use of SCID's.

Lawler et al (USPN 5,805,763) – Discloses a system and method for automatically recording programs in an interactive viewing system.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael W. Hoye whose telephone number is (703) 305-6954. The Examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Miller, can be reached at (703) 305-4795.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(703) 308-HELP**.

Michael W. Hoye
October 4, 2004

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600